

## MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project  
Advisory Group and Interested Parties

FROM: John Pandiani

DATE: June 25, 1999

RE: 16 State Hospital Utilization

As you know, the new 16 State Performance Indicator Project is designed to produce comparable indicators of mental health service system performance across states. The attached is the first report to provide actual quantitative indicators that compare service systems in the 16 states. To me, one of the most interesting findings of this analysis was the similarity (across different states) in relative risk of state hospitalization for people in different age, gender, and race/ethnic categories.

We look forward to your comments, questions, and suggestions for further analysis (802-241-2638; [jpandiani@ddmhs.state.vt.us](mailto:jpandiani@ddmhs.state.vt.us)).

State Hospital

# PENETRATION / UTILIZATION RATES

## For Sixteen States

By Age, Gender, and Race/Ethnicity

A Project of the CMHS 16 State Performance Indicator Pilot Project

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The degree to which people in need have access to mental health services has been a concern of program administrators and evaluators for some time. In the 16 state project, two widely recognized approaches to the measurement of access to care were used: consumer surveys, and penetration utilization rates.

Consumer surveys have the advantage of providing direct feedback from people in need of care. The major shortcoming of consumer surveys for measuring access to care is that they do not obtain information from people who have not gained access to care, and they do not provide measures of the size of the population of people who do not have access to care.

Penetration/utilization rates, on the other hand, provide a basic and powerful measure of the amount of access to care in a geographical region. This indicator of access to care is produced by directly measuring the number of people who use specified services in an area, and comparing this utilization to the size of the general population in the same area. The measure can be computed for the population as a whole, and for specified sub-populations (such as age, gender, and race/ethnic groups). This measure, however, has at least one major shortcoming. It does not say why variation in access to care exists.

As with all measures of program performance, penetration/utilization rates should be considered in light of the larger public policy environment and the values represented by the system of care. The interpretation of penetration/utilization rates for state hospitals are particularly sensitive in this regard. Although they were once thought of as a progressive reform, state hospitals have more recently become devalued by many advocates and program administrators. Whether groups that have greater access to state hospitals should be considered advantaged or disadvantaged may be a matter on which well meaning people disagree.

## **State Hospital Penetration/Utilization Rates**

There are two basic building blocks for state hospital penetration/utilization rates: an unduplicated count of the number of individuals served during a specified time period, and an unduplicated count of the total number of people at risk. To date, 15 of the 16 state mental health authorities have provided unduplicated counts of the number of people served by their state hospitals during FY1998. These counts include the total number served and breakouts of the number for people in specified age, sex, race/ethnic and clinical categories. (The preliminary counts provided by the state of Indiana include some duplication of individuals who have multiple admissions during the year.) Information on the size and characteristics of the general population of each state was obtained from the United States Census Bureau web site: [http://www.census.gov/population/www/estimates/st\\_sasrh.html](http://www.census.gov/population/www/estimates/st_sasrh.html).

The pages that follow provide a basic overview of State Hospital penetration/utilization rates for 16 states, overall, and for age, sex, and race/ethnicity groups. Despite substantial variation in overall state hospital utilization rates, some patterns are evident. In every state, white people had substantially lower state hospital utilization rates than other residents. In 12 of the 16 states, women had substantially lower state hospital utilization rates than men. In almost every state, children and the elderly had lower hospitalization rates, and people in the 31-45 year age group had the highest utilization rate.

State hospitals, of course, do not represent the totality of inpatient psychiatric care that is available to people in need. In many states, the state mental health authority contracts directly for inpatient care through other mechanisms. (A list of other arrangements in the 16 states is appended.) In all states, inpatient psychiatric care is provided in a variety of other settings that include general hospitals, private psychiatric hospitals, and veteran's hospitals, among others. In order to obtain a full profile of behavioral health care penetration/utilization rates, mechanisms for measuring the utilization of these service sectors will need to be developed as well.

## Next Steps

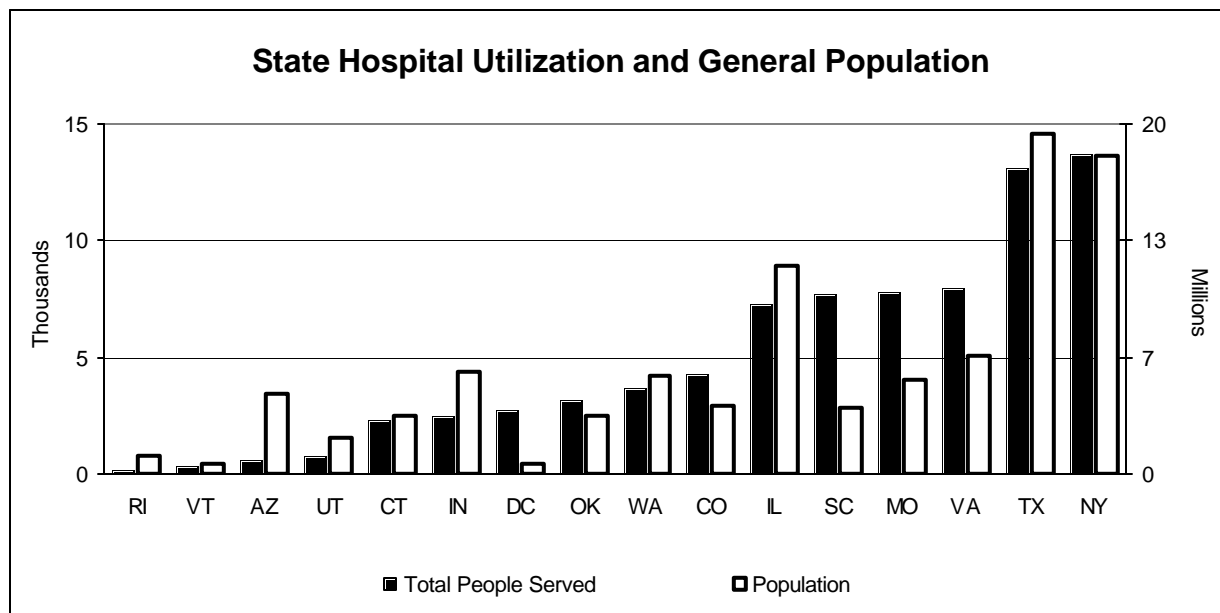
Over the course of the coming year, the measurement of penetration/utilization rates in the 16 states will be expanded to include community programs and other arrangements for the provision of inpatient care.

Inpatient care that is not provided in state hospitals but is directly purchased by the state mental health authority will be measured where the required data is available. In addition, the possibility of creating an integrated data base of episodes of inpatient care in the 16 states has been raised and is being discussed.

The major focus of activity of the coming year will involve the measurement of penetration utilization rates for community programs. As a first step, penetration/utilization rates for community programs in each state will be measured using the methodology demonstrated here. States that are interested may also develop penetration/utilization rates for regions within their states. The final step of this portion of the 16 state project calls for the production of total penetration/utilization rates for public mental health services in each state. This will require unduplicated counts of the number of people served by community programs, state hospitals, and other inpatient programs directly supported by the state mental health authority.

## Settings of SMHA Provided or Purchased Inpatient Care in 16 Sates

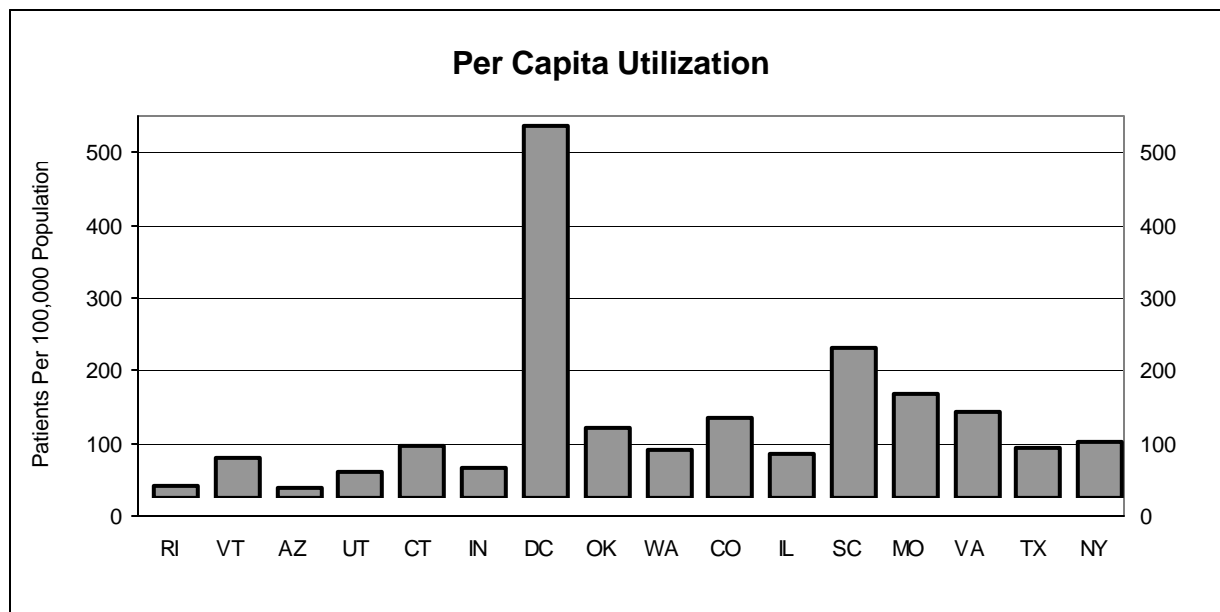
AZ	Inpatient services are provided by State Hospitals and by other inpatient facilities.
CT	Inpatient services are provided by State Hospitals and under contract with local general hospitals in Eastern CT and in local general hospitals for General Assistance recipients through managed care contract.
CO	State hospitals account for all inpatient services provided by the state mental health authority.
DC	State hospitals account for all inpatient services provided by the state mental health authority.
IL	Inpatient services are provided by State Hospitals and are purchased from community hospitals.
IN	Inpatient services are provided by State Hospitals and through case rate reimbursement to local community mental health centers.
MO	Inpatient services are provided by State Hospitals and under contract with other facilities.
NY	State hospitals account for all inpatient services provided by the state mental health authority.
OK	Inpatient services are provided by State Hospitals and by state operated and private non-profit community mental health center.
RI	Inpatient services are provided by a state operated general hospital and are purchased under contract with a privately operated psychiatric hospital.
SC	State hospitals account for all inpatient services provided by the state mental health authority.
TX	State hospitals account for all inpatient services provided by the state mental health authority.
UT	Inpatient services also provided by local community mental health centers with funding from the state authority.
VA	State hospitals account for all inpatient services provided by the state mental health authority.
VT	State hospitals account for all inpatient services provided by the state mental health authority.
WA	Inpatient services are provided by State Hospitals and under contract with other facilities.

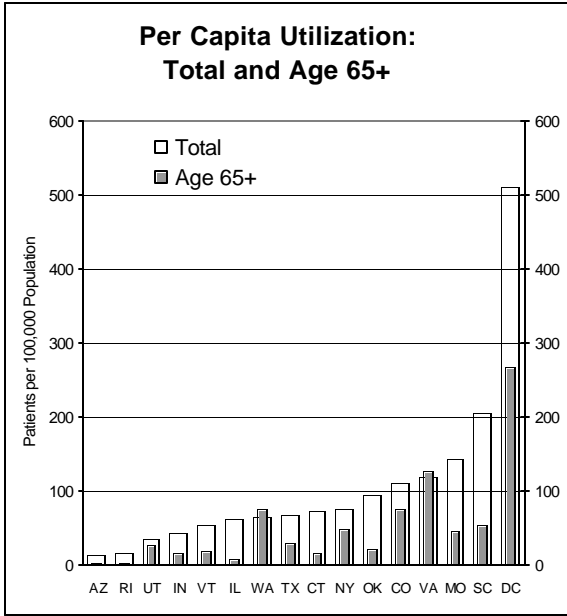
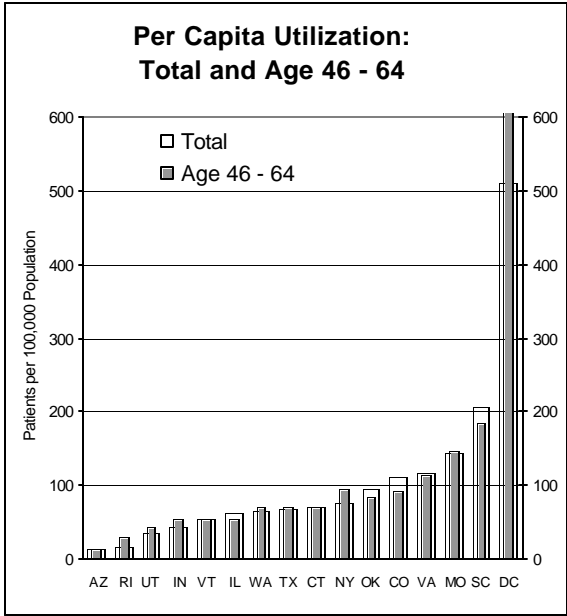
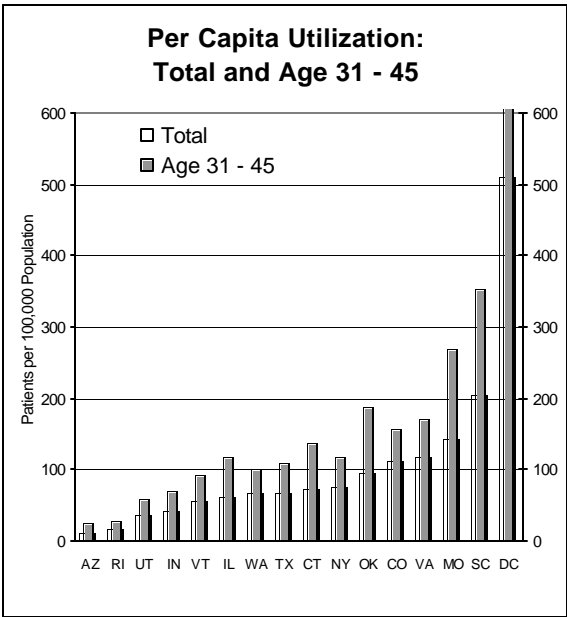
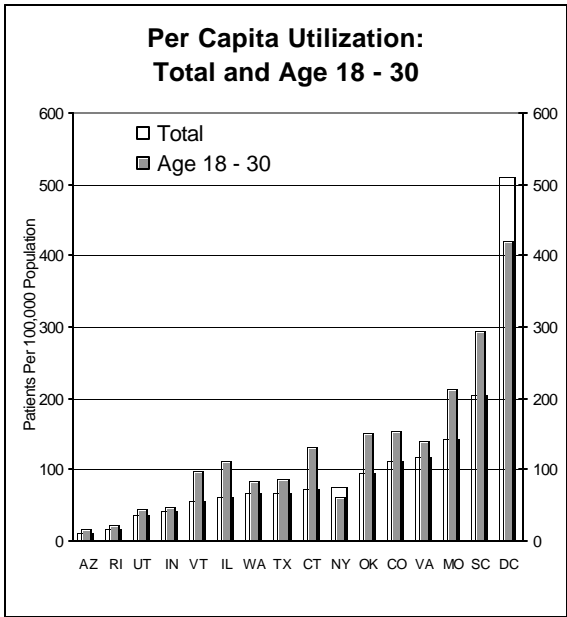
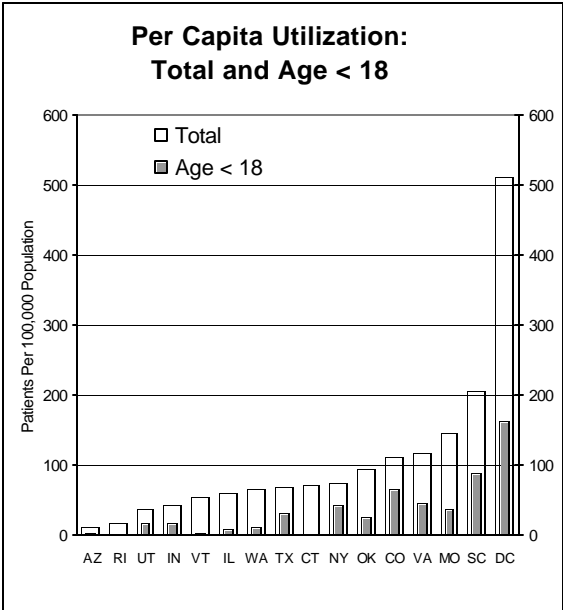


**COMPUTATION:**

**Penetration / Utilization Rate**

$$\frac{\text{Hospital Utilization} \times 100,000}{\text{Total Population}}$$





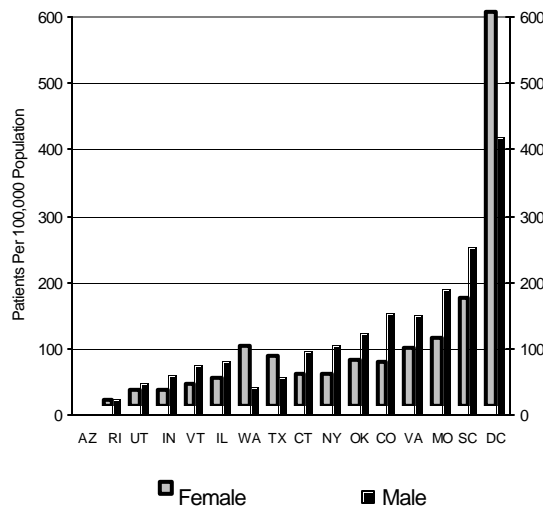
## COMPUTATION:

**Relative Risk**  
(for Group One As Compared to Group Two)

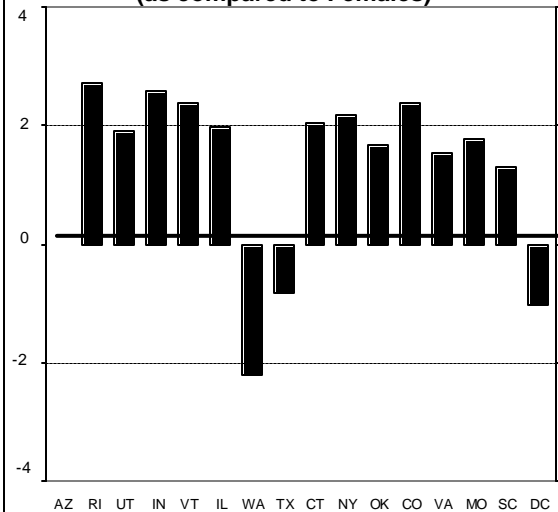
**Rate One**

**Rate Two**

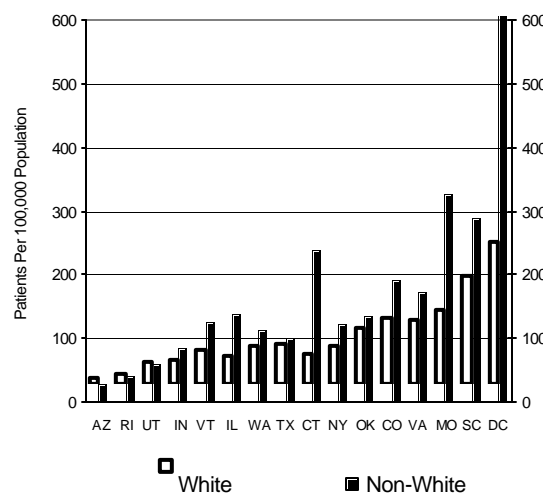
**Per Capita Utilization:  
FEMALES and MALES**



**Relative Risk for MALES  
(as compared to Females)**



**Per Capita Utilization:  
NON-WHITES/WHITES**



**Relative Risk for NON-WHITES  
(as compared to Whites)**

